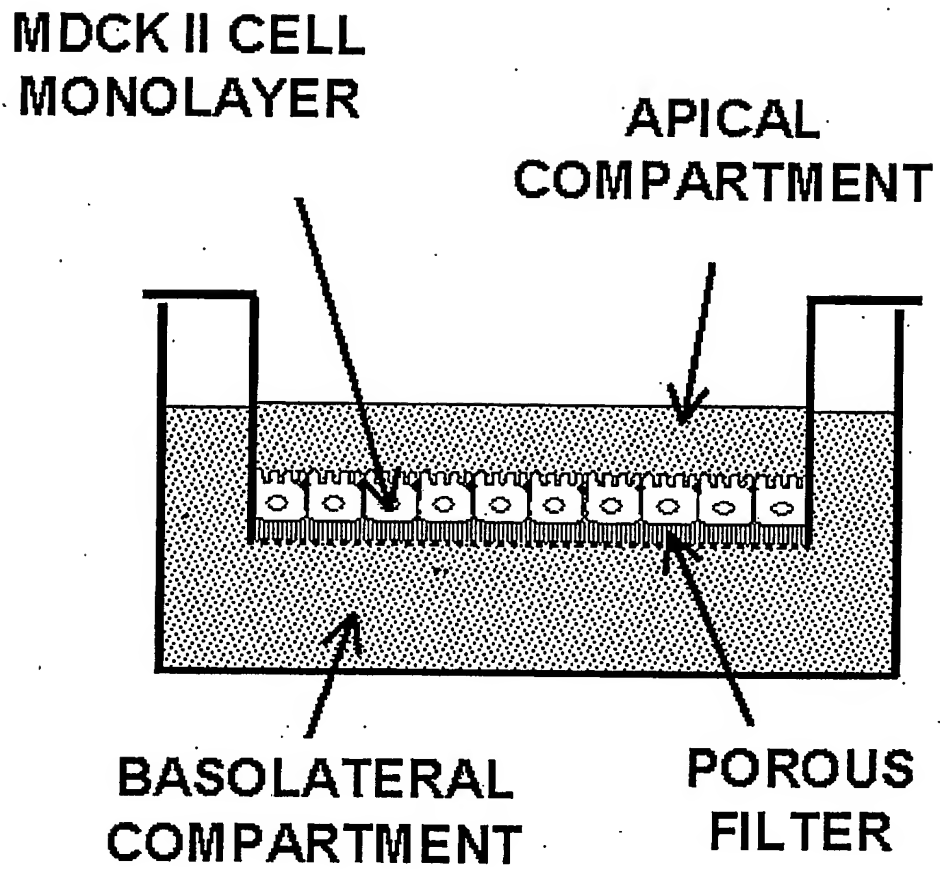
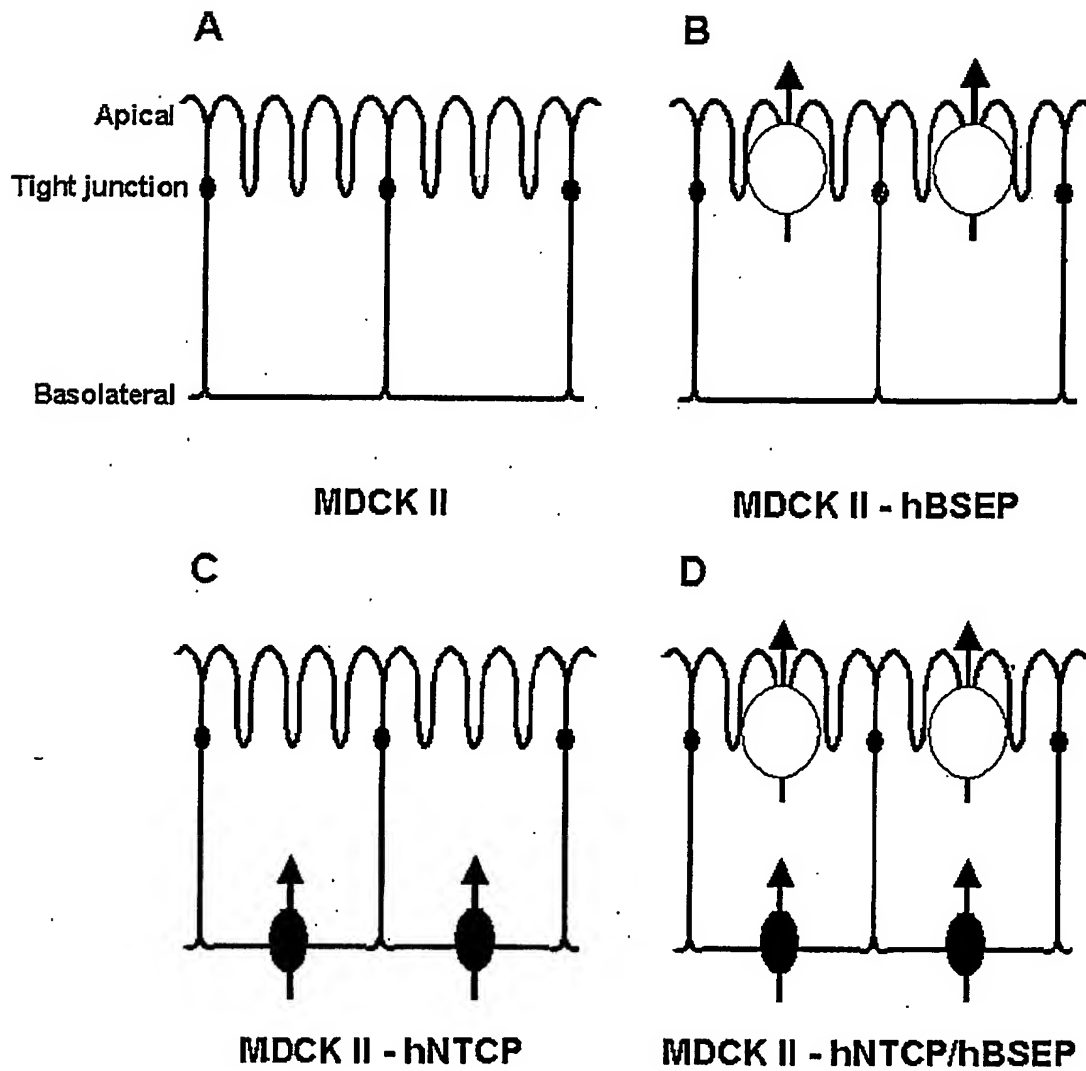


Fig. 1



2/11

Fig. 2



3/11

Fig 3

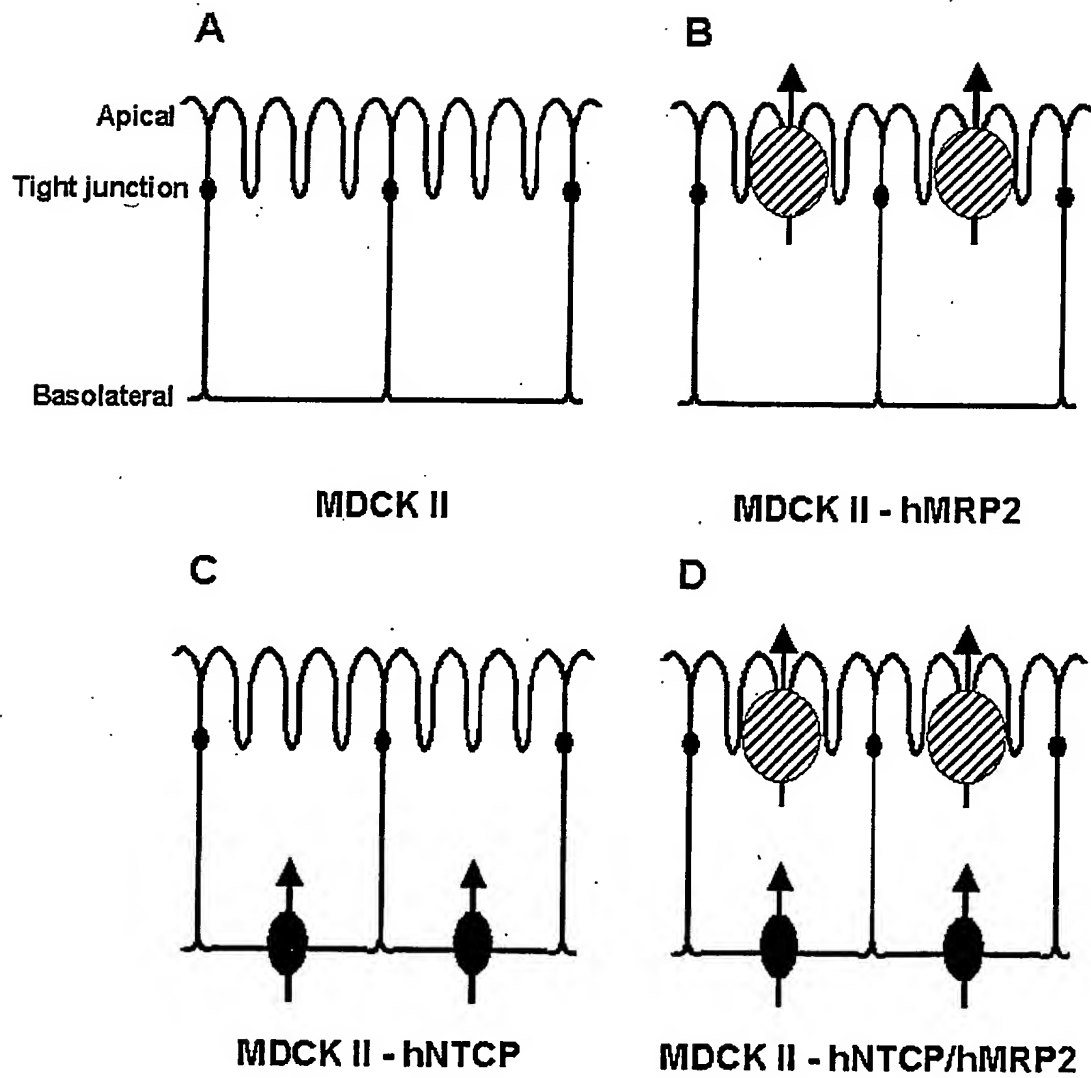
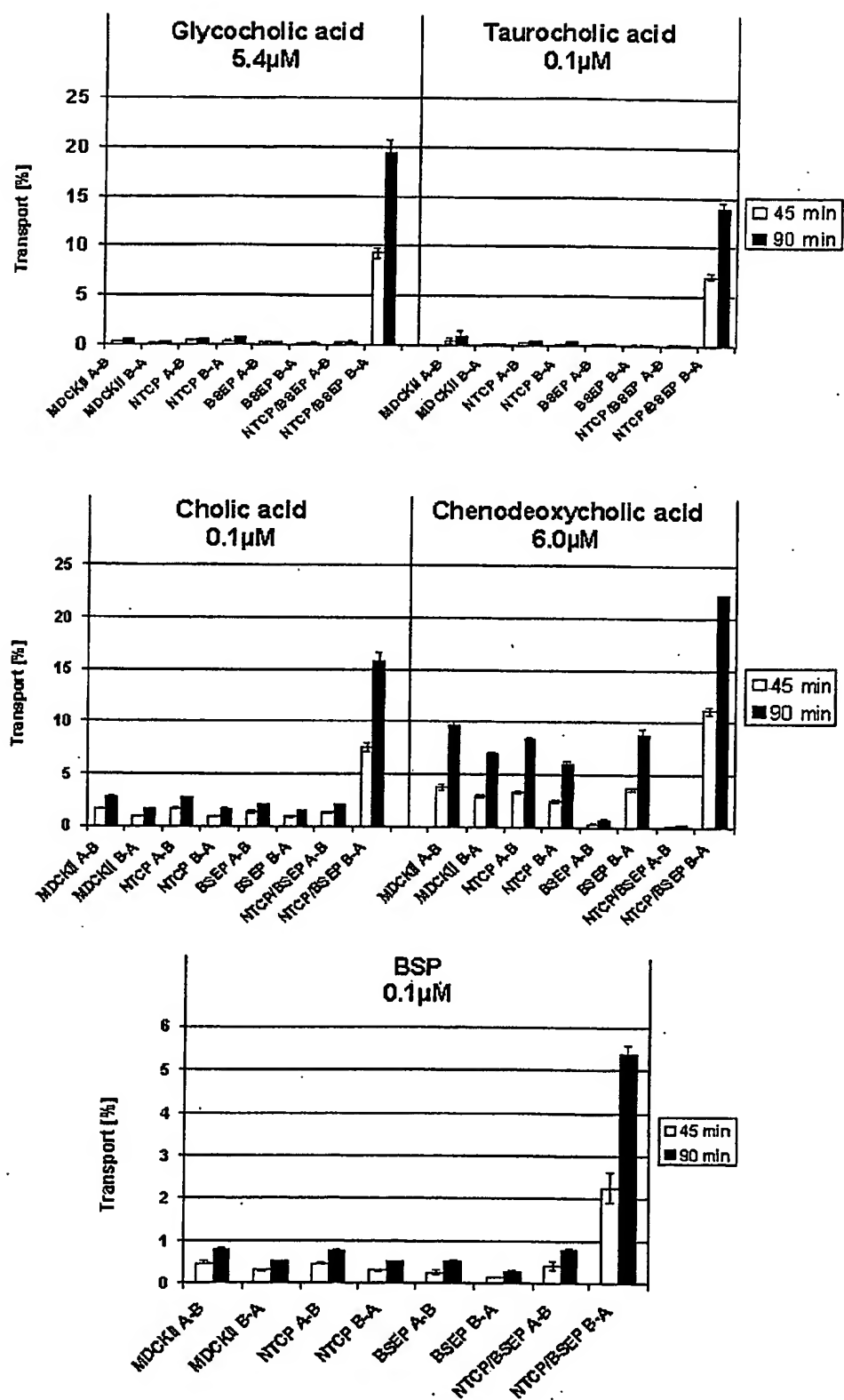


Fig. 4

4/11



5/11

Fig. 5

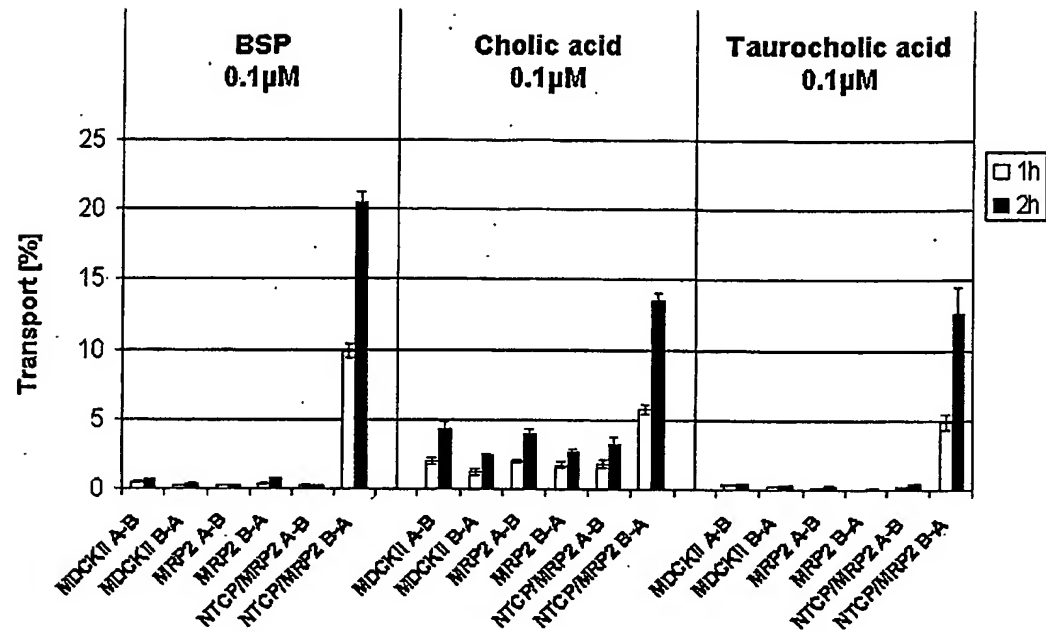


Fig. 6

CAGGAGGATGGAGGCCACAAACGCGTCTGCCCCATTCAACTTCACCCTGCCACCCAACTTTGGCAAGCGCCCCACAGACC  
TGGCACTGAGCGTCATCCTGGTGTTCATGTTGTTCTTCATCATGCTCTCGCTGGGCTGCACCATGGAGTTCAGCAAGATC  
AAGGCTCACTTATGGAAGCCTAAAGGGCTGGCCATCGCCCTGGTGGCACAGTATGGCATCATGCCCTCACGGCCTTTGT  
GCTGGGCAAGGTCTTCCGGCTGAAGAACATGAGGCACTGGCCATCTTGGTCTGTGGCTGCTCACCTGGAGGGAACCTGT  
CCAATGTCTTCAGTCTGGCCATGAAGGGGACATGAACCTCAGCATTGTGATGACCACCTGCTCCACCTTCTGTGCCCTT  
GGCATGATGCCTCTCCTCCTGTACATCTACTCCAGGGGGATCTATGATGGGGACCTGAAGGACAAGGTGCCCTATAAAGG  
CATCGTGATATCACTGGTCCTGGTCTCATTCCTTGACCATAGGGATCGTCCTCAAATCTAAACGGCCACAATACATGC  
GCTATGTCATCAAGGGAGGGATGATCATCATTCTCTGTGCAGTGTGGCCGTCACAGTTCCTCTGCCATCAATGTGGGG  
AAGAGCATCATGTTTGCCATGACACCACTCTTGATTGCCACCTCCTCCCTGATGCCTTCTATTGGCTTTCTGCTGGGTTA  
TGTTCTCTCTGCTCTCTTCTGCCTCAATGGACGGTGCAGACGCACTGTCAGCATGGAGACTGGATGCCAAAATGTCCAAC  
TCTGTTCCACCATCCTCAATGTGGCCTTTCCACCTGAAGTCATTGGACCACTTTTCTTCTTTCCCTCCTCTACATGATT  
TTCCAGCTTGGAGAAGGGCTTCTCCTCATTGCCATATTTTGGTGCTATGAGAAATCAAGACTCCCAAGGATAAAACAAA  
AATGATCTACACAGCTGCCACAACCTGAAGAAACAATTCCAGGAGCTCTGGGAAATGGCACCTACAAAGGGGAGGACTGCT  
CCCCTTGACACAGCCTAGCCCT

7/11

Fig. 7

ATGTCGACTCAGTAATTCCTCGAAGTATAAAGAAATTTGGAGAGGAGAATGATGGTTTTGAGTCAGATAAATCATATAA  
TAATGATAAGAAATCAAGGTTACAAGATGAGAAGAAAGGTGATGGCGTTAGAGTTGGCTTCTTTCAATTGTTTCGGTTTT  
CTTCATCAACTGACATTTGGCTGATGTTTGTGGGAAGTTTGTGTGCATTTCTCCATGGAATAGCCCAGCCAGGCGTGCTA  
CTCATTTTTGGCACAATGACAGATGTTTTATTGACTACGACGTTGAGTTACAAGAACTCCAGATTCCAGGAAAAGCATG  
TGTGAATAACACCATTGTATGGACTAACAGTTCCTCAACCAGAACATGACAAATGGAACACGTTGTGGGTTGCTGAACA  
TCGAGAGCGAAATGATCAAATTTGCCAGTTACTATGCTGGAATTGCTGTGCGCAGTACTTATCACAGGATATATTCAAATA  
TGCTTTTGGGTCATTGCCGCGAGCTCGTCAGATACAGAAAATGAGAAAATTTTACTTTAGGAGAATAATGAGAATGGAAAT  
AGGGTGGTTTTGACTGCAATTCAGTGGGGGAGCTGAATACAAGATTCTCTGATGATATTAATAAAATCAATGATGCCATAG  
CTGACCAAATGGCCCTTTTCATTGAGCGCATGACCTCGACCATCTGTGGTTTCTGTGGGATTTTTCAGGGGTTGGAAA  
CTGACCTTGGTTATTATTTCTGTGAGCCCTCTCATTTGGGATTGGAGCAGCCACCATTGGTCTGAGTGTGTCAGTTTAC  
GGACTATGAGCTGAAGGCCTATGCCAAGCAGGGGTGGTGGCTGATGAAGTCATTTTCATCAATGAGAACAGTGGCTGCTT  
TTGGTGGTGAGAAAAGAGAGGTTGAAAGGTATGAGAAAATCTTGTGTTTCGCCAGCGTTGGGGAATTAGAAAAGGAATA  
GTGATGGGATTCCTTTACTGGATTCTGTGTTGTCTCATCTTTTGTGTTATGCACTGGCCTTCTGGTACGGCTCCACACT  
TGTCTGGATGAAGGAGAATATACACCAGGAACCTTGTCCAGATTTTCTCAGTGTATAGTAGGAGCTTTAAATCTTG  
GCAATGCCTCTCCTTGTGGAAGCCTTTGCAACTGGACGTGCAGCAGCCACCAGCATTTTTGAGACAATAGACAGGAAA  
CCCATCATTGACTGCATGTGAGAAGATGGTTACAAGTTGGATCGAATCAAGGGTGAAATTGAATTCATAATGTGACCTT  
CCATTATCCTTCCAGACCAGAGGTGAAGATTCTAAATGACCTCAACATGGCCATTAAACAGGGGAAATGACAGCTCTGG  
TAGGACCCAGTGGAGCTGGAAGGAGTACAGCACTGCAACTCATTGAGCGATTCTATGACCCCTGTGAAGGAATGGTGACC  
GTGGATGGCCATGACATTCTGCTCTCTTAACATTGAGTGGCTTAGAGATCAGATTGGGATAGTGGAGCAAGAGCCAGTTCT  
GTTCTCTACCACATTGACAGAAAATATTGCTATGGCAGAGAAGATGCAACAATGGAAGACATAGTCCAAGCTGCCAAGG  
AGGCCAATGCCATCAACTTCATCATGGACCTGCCACAGCAATTTGACACCCTTGTGGAGAAGGAGGAGCCAGATGAGT  
GGTGGCCAGAAACAAAGGGTAGCTATCGCCAGAGCCCTCATCCGAAATCCCAAGATTCTGCTTTTGGACATGGCCACCTC  
AGCTCTGGACAATGAGAGTGAAGCCATGGTGAAGAAGTGCTGAGTAAGATTGAGCATGGGCACACAATCATTTGAGTTG  
CTCATCGCTTGTCTACGGTCAGAGCTGCAGATACCATCATTGGTTTTGAACATGGCACTGCAGTGGAAAGAGGGACCCAT  
GAAGAATTACTGGAAGGAAAGGTGTTTACTTCACTCTAGTGACTTTGCAAAGCCAGGGAAATCAAGCTCTTAATGAAGA  
GGACATAAAGGATGCAACTGAAGATGACATGCTTGGCAGGACCTTTAGCAGAGGGAGCTACCAGGATAGTTTAAAGGCTT  
CCATCCGGCAACGCTCCAAGTCTCAGCTTTCTTACCTGGTGCACGAACCTCCATTAGCTGTTGTAGATCATAAGTCTACC  
TATGAAGAAGATAGAAAGGACAAGGACATTCTGTGCGAGGAAGAAGTTGAACCTGCCCCAGTTAGGAGGATTCTGAAAT  
CAGTGCTCCAGAATGGCCCTACATGCTGGTAGGGTCTGTGGGTGCAGCTGTGAACGGGACAGTCACACCCTTGATGCCT  
TTTTATTGAGCCAGATTCTTGGGACTTTTTCAATTCCTGATAAAGAGGAACAAAGGTACAGATCAATGGTGTGTGCCTA  
CTTTTTGTAGCAATGGGCTGTGTATCTCTTTTACCCAATTTCTACAGGGATATGCCTTTTGCTAAATCTGGGGAGCTCCT  
AACAAAAGGCTACGTAAATTTGGTTTCAGGGCAATGCTGGGGCAAGATATTGCCTGGTTTGATGACCTCAGAAATAGCC  
CTGGAGCATTGACAACAAGACTTGCTACAGATGCTTCCCAAGTTCAAGGGGCTGCCGGCTCTCAGATCGGGATGATAGTC  
AATTCCTTCACTAACGTCACTGTGGCCATGATCATTGCCTTCTCCTTTAGCTGGAAGCTGAGCCTGGTCATCTTGTGCTT  
CTTCCCCTTCTTGGCTTTATCAGGAGCCACACAGACCAGGATGTTGACAGGATTTGCCTCTCGAGATAAGCAGGCCCTGG  
AGATGGTGGGACAGATTACAAATGAAGCCCTCAGTAACATCCGCACTGTTGCTGGAATTGGAAGGAGAGCGGTTTCATT  
GAAGCACTTGAGACTGAGCTGGAGAAGCCCTTCAAGACAGCCATTGAGAAAGCCAATATTTACGGATTCTGCTTTGCCTT  
TGCCAGTGATCATGTTTATTGCGAATTCTGCTTCTACAGATATGGAGGTTACTTAATCTCCAATGAGGGGCTCCATT  
TCAGCTATGTGTTGAGGTGATCTCTGAGTTGTACTGAGTGCAACAGCTCTTGAAGAGCCTTCTCTTACACCCCAAGT  
TATGCAAAGCTAAAATATCAGCTGCACGCTTTTTTCAACTGCTGGACCGACAACCCCAATCAGTGTATACAACTAGC  
AGGTGAAAAATGGGACAACCTCCAGGGGAAGATTGATTTTGTGATTGTAATTTACATATCCTTCTCGACCTGACTCGC

AAGTTCTGAATGGTCTCTCAGTGTGATTAGTCCAGGGCAGACACTGGCGTTTGTGGGAGCAGTGGATGTGGCAAAGC  
ACTAGCATT CAGCTGTTGGAACGTTTCTATGATCCTGATCAAGGGAAGGTGATGATAGATGGTCATGACAGCAAAAAAGT  
AAATGTCCAGTTCTCCGCTCAAACATTGGAATTGTTTCCAGGAACCAGTGTGTTTGCCTGTAGCATAATGGACAATA  
TCAAGTATGGAGACAACACCAAAGAAATCCCATGGAAAGAGTCATAGCAGCTGCAAAACAGGCTCAGCTGCATGATTTT  
GTCATGTCACTCCCAGAGAAATATGAAACTAACGTTGGGTCCCAGGGGTCTCAACTCTCTAGAGGGGAGAAACAACGCAT  
TGCTATTGCTCGGGCCATTGTACGAGATCCTAAAATCTTGCTACTAGATGAAGCCACTTCTGCCTTAGACACAGAAAGTG  
AAAAGACGGTGCAGGTTGCTCTAGACAAAGCCAGAGAGGGTCGGACCTGCATTGTGCTTATGCCCATCGCTTGTCCACCATC  
CAGAACGCGGATATCATTGCTGTGTCATGGCACAGGGGGTGGTGATTGAAAAGGGGACCCATGAAGAACTGATGGCCCCAAA  
AGGAGCCTACTACAAACTAGTCACCACTGGATCCCCCATCAGTTGA



Fig. 8

AGTCCAGGAATCATGCTGGAGAAGTTCTGCAACTCTACTTTTTTGAATTCCTCATTCTCGACAGTCCGGAGGCAGACCT  
GCCACTTTGTTTTGAGCAAAGTGTCTGGTGTGGATTCCCTTGGGCTTCTATGGCTCCTGGCCCCCTGGCAGCTTCTCC  
ACGTGTATAAATCCAGGACCAAGAGATCCTCTACCACCAAAGTCTATCTTGCTAAGCAGGTATTCTGTTGGTTTTCTCTT  
ATTCTAGCAGCCATAGAGCTGGCCCTGTACTCACAGAAGACTCTGGACAAGCCACAGTCCCTGCTGTTTCGATATACCAA  
TCCAAGCCTCTACCTAGGCACATGGCTCCTGGTTTTGCTGATCCAATACAGCAGACAATGGTGTGTACAGAAAACTCCT  
GGTTCTGTCCCTATTCTGGATTCTCTCGATACTCTGTGGCACTTTCCAATTTAGACTCTGATCCGGACACTCTTACAG  
GGTGACAATTTCTAATCTAGCCTACTCTGCCTGTTCTTCTCTCTACGGATTCCAGATCCTGATCCTGATCTTTTCAGC  
ATTTTCAGAAAATAATGAGTCATCAAATAATCCATCATCCATAGCTTCATTCTGAGTAGCATTACCTACAGCTGGTATG  
ACAGCATCATTCTGAAAGGCTACAAGCGTCTCTGACACTCGAGGATGTCTGGGAAGTTGATGAAGAGATGAAAACCAAG  
ACATTAGTGAGCAAGTTTGAACGCACATGAAGAGAGAGCTGCAGAAAGCCAGGCGGGCACTCCAGAGACGGCAGGAGAA  
GAGCTCCCAGCAGAACTCTGGAGCCAGGCTGCCTGGCTTGAACAAGAATCAGAGTCAAAGCCAGATGCCCTTGTCCTGG  
AAGATGTTGAAAAGAAAAAAGAAGTCTGGGACCAAAAAAGATGTTCCAAAATCCTGGTTGATGAAGGCTCTGTTCAAA  
ACTTCTACATGGTGCTCCTGAAATCATTCCTACTGAAGCTAGTGAATGACATCTTCACGTTTGTGAGTCTCAGCTGCT  
GAAATTGCTGATCTCCTTTGCAAGTGACCGTGACACATATTTGTGGATTGGATATCTCTGTGCAATCCTCTTATTCAGT  
CGGCTCTCATTAGTCTTTCTGCCTTCAGTGTTATTTCCAAGTGTGCTTCAAGCTGGGTGTAAGTACGGACAGCTATC  
ATGGCTTCTGTATATAAGAAGGCATTGACCCTATCCAAGTTGGCCAGGAAGGAGTACACCGTTGGAGAAACAGTGAACCT  
GATGCTGTGGATGCCAGAAGCTCATGGATGTGACCAACTTCATGCACATGCTGTGGTCAAGTGTTCTACAGATTGTCT  
TATCTATCTTCTCTATGGAGAGAGTTGGGACCCCTCAGTCTTAGCAGGTGTGGGGTGATGGTGCTTGTAAATCCCAATT  
AATGCGATACTGTCCACCAAGAGTAAGACCATTAGGTCAAAAATATGAAGAATAAAGACAAACGTTTAAAGATCATGAA  
TGAGATTCTTAGTGGAATCAAGATCTGAAATATTTTGCTGGGAACCTTCATTGAGAGACCAAGTACAAAACCTCCGGA  
AGAAAGAGCTCAAGAACCTGTGGCCTTTAGTCAACTACAGTGTGTAGTAATATTCTGTTCCAGTTAACTCCAGTCTCTG  
GTATCTGTGGTCACATTTTCTGTTTTATGTCCTGGTGGATAGCAACAATATTTTGGATGCACAAAAGGCTTCACCTCCAT  
TACCTCTTCAATATCCTGCGCTTTCCCTGAGCATGCTTCCCATGATGATCTCCTCCATGCTCCAGGCCAGTGTTCCTCA  
CAGAGCGGCTAGAGAAGTACTTGGGAGGGGATGACTTGGACACATCTGCCATTGACATGACTGCAATTTTGACAAAGCC  
ATGCAGTTTTCTGAGGCCCTCCTTTACCTGGGAACATGATTGGAAGCCACAGTCCGAGATGTGAACCTGGACATTATGGC  
AGGCCAACTTGTGGCTGTGATAGGCCCTGTGCGCTCTGGGAAATCCTCCTTGATATCAGCCATGCTGGGAGAAATGGAAA  
ATGTCCACGGGCACATCACCATCAAGGGCACCAGTCCCTATGTCCACAGCAGTCTGGATTGAGAATGGCACCATAAAG  
GACAACATCCTTTTGAACAGAGTTTAATGAAAAGAGGTACCAGCAAGTACTGGAGGCCTGTGCTCTCCTCCAGACTT  
GGAAATGCTGCTGGAGGAGATTTGGCTGAGATTGGAGAGAAGGGTATAAATCTTAGTGGGGGTGAGAAGCAGCGGATCA  
GCCTGGCCAGAGCTACCTACCAAAATTTAGACATCTATCTTAGATGACCCCTGTCTGCAGTGGATGCTCATGTAGGA  
AAACATATTTTTAATAAGGTCTTGGGCCCCAATGGCCTGTTGAAAGGCAAGACTCGACTCTTGGTTACACATAGCATGCA  
CTTTCTCCTCAAGTGATGAGATTGTAGTTCTGGGGAATGGAACAATTGTAGAGAAAGGATCCTACAGTGTCTCCTGG  
CCAAAAAGGAGAGTTTGCTAAGAATCTGAAGACATTTCTAAGACATACAGGCCCTGAAGAGGAAGCCACAGTCCATGAT  
GGCAGTGAAGAAGAAGACGATGACTATGGGCTGATATCCAGTGTGGAAGAGATCCCCGAAGATGCAGCCTCCATAACCAT  
GAGAAGAGAGAACAGCTTTTCGTCGAACACTTAGCCGAGTCTAGGTCCAATGGCAGGCATCTGAAGTCCCTGAGAACT  
CCTTGAAAACCTCGGAATGTGAATAGCCTGAAGGAAGACGAAGAAGTGTGAAAGGACAAAACTAATTAAGAAGGAATT  
ATAGAAACTGGAAGGTGAAGTTCTCCATCTACCTGGAGTACCTACAAGCAATAGGATTGTTTTCGATATTCTTCATCAT  
CCTTGCGTTTGTGATGAATTCTGTGGCTTTTATTGGATCCAACCTCTGGCTCAGTGTGACCAGTGACTCTAAAACT  
TCAATAGCACCAGTATCCAGCATCTCAGAGGGACATGAGAGTTGGAGTCTACGGAGCTCTGGGATTAGCCCAAGGTATA  
TTTGTGTTCATAGCACATTTCTGGAGTGCCTTTGGTTTCGTCCATGCATCAAATATCTTGACAAAGCAACTGCTGAACAA  
TATCCTTCGAGCACCTATGAGATTTTTTGACACAACACCCACAGGCCGGATTGTGAACAGGTTTCCGGCGATATTTCCA

CAGTGGATGACACCCTGCCTCAGTCCTTGCGCAGCTGGATTACATGCTTCCTGGGGATAATCAGCACCCCTTGTATGATC  
TGCATGGCCACTCCTGTCTTCACCATCATCGTCATTCCCTCTTGGCATTATTTATGTATCTGTTTCTGATGTTTTATGTGTC  
TACCTCCCGCCAGCTGAGGCGTCTGGACTCTGTACCAGGTCCCAATCTACTCTCACTTCAGCGAGACCGTATCAGGTT  
TGCCAGTTATCCGTGCCTTTGAGCACCAGCAGCGATTCTGAAACACAATGAGGTGAGGATTGACACCAACCAGAAATGT  
GTCTTTTCTGGATCACCTCCAACAGGTGGCTTGCAATTGCGCTGGAGCTGGTTGGGAACCTGACTGTCTTCTTTTCAGC  
CTTGATGATGGTTATTTATAGAGATACCCTAAGTGGGGACACTGTTGGCTTTGTTCTGTCCAATGCACTCAATATCACAC  
AAACCCTGAACTGGCTGGTGAGGATGACATCAGAAATAGAGACCAACATTGTGGCTGTTGAGCGAATAACTGAGTACACA  
AAAGTGGAAAATGAGGCACCCTGGGTGACTGATAAGAGGCCTCCGCCAGATTGGCCAGCAAAGGCAAGATCCAGTTTAA  
CAACTACCAAGTGGGTACCGACCTGAGCTGGATCTGGTCTCAGAGGGATCACTTGTGACATTGGTAGCATGGAGAAGA  
TTGGTGTGGTGGGCAGGACAGGAGCTGGAAAGTCATCCCTCACAACCTGCCTCTTCAGAATCTTAGAGGCTGCCGGTGGT  
CAGATTATCATGATGGAGTAGATATTGCTTCATTGGGCTCCACGACCTCCGAGAGAAGCTGACCATCATCCCCAGGA  
CCCCATCCTGTTCTCTGGAAGCCTGAGGATGAATCTCGACCCTTTCAACAATACTCAGATGAGGAGATTGGAAGGCCT  
TGGAGCTGGCTCACCTCAAGTCTTTTGTGGCCAGCCTGCAACTTGGGTTATCCACGAAGTGACAGAGGCTGGTGGCAAC  
CTGAGCATAGGCCAGAGGCAGCTGCTGTGCCTGGGCAGGGCTCTGCTTCGGAAATCCAAGATCCTGGTCTGGATGAGGC  
CACTGCTGCGGTGGATCTAGAGACAGACAACCTCATTGAGACGACCATCCAAAACGAGTTGCCCCACTGCACAGTGATCA  
CCATCGCCACAGGCTGCACACCATCATGGACAGTGACAAGGTAATGGTCCTAGACAACGGGAAGATTATAGAGTGGGGC  
AGCCCTGAAGAACTGCTACAAATCCCTGGACCCTTTTACTTTATGGCTAAGGAAGCTGGCATTGAGAATGTGAACAGCAC  
AAAATTCTAG

9/11

Fig. 9

GACGGATCGGGAGATCTCCCGATCCCCTATGGTGCACTCTCAGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGTAT  
CTGCTCCCTGCTTGTGTGTTGGAGGTCGCTGAGTAGTGCGCGAGCAAAATTTAAGCTACAACAAGGCAAGGCTTGACCGA  
CAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTCGCGTGCTTCGCGATGTACGGGCCAGATATACGCGTTGACATT  
GATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCGCGTTACATAA  
CTTACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGT  
AACGCCAATAGGGACTTTCATTGACGTCAATGGGTGGAGTATTTACGGTAACTGCCCACTTGGCAGTACATCAAGTGT  
ATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCCAGTACATGACCTTA  
TGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTGGCAGTACATCAA  
TGGCGCTGGATAGCGGTTGACTCACGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACC  
AAAATCAACGGGACTTTCAAAATGTGTAACAACCTCCGCCCATTTGACGCAAATGGGCGGTAGGCGTGTACGGTGGGAG  
GTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAG  
GGAGACCCAAGCTGGCTAGCGTTTAACTTAAGCTTGGTACCGAGCTCGGATCCCAGGAGGATGGAGGCCACAACGCGT  
CTGCCCCATTCAACTTCACCCCTGCCACCCAACTTTGGCAAGCGCCCCACAGACCTGGCACTGAGCGTCATCCTGGTGTTC  
ATGTTGTTCTTCATCATGCTCTCGCTGGGCTGCACCATGGAGTTTCAAGATCAAGGCTCACTTATGGAAGCCTAAAGG  
GCTGGCCATCGCCCTGGTGGCACAGTATGGCATCATGCCCTCACGGCCTTTGTGCTGGGCAAGGCTTCCGGCTGAAGA  
ACATTGAGGCACTGGCCATCTTGGTCTGTGGCTGCTCACCTGGAGGGAACCTGTCCAATGTCTTCAGTCTGGCCATGAAG  
GGGGACATGAACCTCAGCATTGTGATGACCACCTGCTCCACCTTCTGTGCCCTTGGCATGATGCCTCTCCTCCTGTACAT  
CTACTCCAGGGGATCTATGATGGGACCTGAAGGACAAGGTGCCCTATAAAGGCATCGTGATACACTGGTCTCGGTTTC  
TCATTCTTGACCATAGGGATCGTCTCAAATCTAAACGGCCACAATACATGCGCTATGTCATCAAGGAGGGATGATC  
ATCATTCTCTTGTGCACTGTGGCCGTACAGTTCTCTCTGCCATCAATGTGGGAAGAGCATCATGTTTGCCATGACACC  
ACTCTTGATTGCCACCTCCTCCTGATGCCCTTCTATTGGCTTTCTGTGCGTTATGTTCTCTGCTCTCTTCTGCTCA  
ATGGACGGTGACAGCGCACTGTGAGCATGGAGACTGGATGCCAAATGTCCAACCTCTGTTCCACCATCCTCAATGTGGCC  
TTTCCACCTGAAGTCATTGGACCACTTTTCTTCTTCCCTCCTCTACATGATTTTCCAGCTTGAGAAGGGCTTCTCCT  
CATTGCCATATTTGGTGCTATGAGAAATCAAGACTCCCAAGGATAAAACAAAATGATCTACACAGCTGCCACAACCTG  
AAGAAACAATTCCAGGAGCTCTGGAAATGGCACTACAAAGGGGAGGACTGCTCCCTTGACAGCCTAGCCCTTCTAG  
AGGGCCCGTTTAAACCGCTGATCAGCCTCGACTGTGCCCTTCTAGTTGCCAGCCATCTGTTGTTGCCCTCCCCGCTGC  
CTTCTTGACCCTGGAAGGTGCCACTCCCACTGTCTTTCTTAATAAAATGAGGAAATGCATCGCATTGTCTGAGTAGG  
TGTCAATCTATTCTGGGGGTGGGGTGGGGCAGGACAGCAAGGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGGA  
TGCGGTGGGCTCTATGGCTTCTGAGGCGAAAGAACCAGCTGGGGCTCTAGGGGTATCCCCACGCGCCCTGTAGCGGCG  
CATTAAGCGCGGGGTGTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCGCTCCTTTCGCT  
TTCTTCCCTTCTTCTCGCCACGTTTCGCCGGCTTTCCCGCTCAAGCTCTAAATCGGGGGCTCCCTTTAGGGTTCCGATT  
TAGTGCTTTACGGCACCTCGACCCCAAAAACCTTGATTAGGGTGATGGTTACGTTAGTGGGCCATCGCCCTGATAGACGG  
TTTTTCGCCCTTTGACGTTGGAGTCCAGTCTTTAATAGTGGACTCTTGTTCAAAACCTGGAACAACACTCAACCCATATC  
TCGGTCTATTCTTTGATTTATAAGGGATTTTGCCGATTTCCGGCTATTGGTTAAAAAATGAGCTGATTTAAACAAAAT  
TAACGCGAATTAATTCTGTGGAATGTGTGTGAGTTAGGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCA  
AAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGC  
ATCTCAATTAGTCAGCAACCATAGTCCCGCCCCCTAACTCCGCCCATCCCGCCCCCTAACTCCGCCCATGTTCCGCCCATCT  
CCGCCCCATGGCTGACTAATTTTTTTTATTTATGACAGAGGCCGAGGCCGCTCTGCCTCTGAGCTATTCCAGAAGTAGTG  
AGGAGGCTTTTTTGGAGGCTAGGCTTTTGCAAAAGCTCCCGGAGCTTGATATCCATTTTCGGATCTGATCAAGAGA  
CAGGATGAGGATCGTTTCGCATGATTGAACAAGATGGATTGCACGCAGGTTCTCCGCCGCTTGGGTGGAGAGGCTATTTC

9/11

GGCTATGACTGGGCACAACAGACAATCGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTGAGCGCAGGGGCGCCCGGTTCT  
TTTTGTCAAGACCGACCTGTCCGGTGCCCTGAATGAACTGCAGGACGAGGCAGCGCGGTATCGTGGCTGGCCACGACGG  
GCGTTCCCTTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACTGGCTGCTATTGGGCGAAGTGCCGGGGCAG  
GATCTCCTGTCTATCTCACCTTGCTCCTGCCGAGAAAGTATCCATCATGGCTGATGCAATGCGGCGGTGCATACGCTTGA  
TCCGGCTACCTGCCCATTTCGACCACCAAGCGAAACATCGCATCGAGCGAGCACGTACTCGGATGGAAGCCGGTCTTGTGCG  
ATCAGGATGATCTGGACGAAGAGCATCAGGGGCTCGCGCCAGCCGAACGTGTTCCGCCAGGCTCAAGGCGCGCATGCCCGAC  
GGCGAGGATCTCGTGTGACCCATGGCGATGCCTGCTTGCCGAATATCATGGTGGAAAATGGCCGCTTTTCTGGATTTCAT  
CGACTGTGGCCGGCTGGGTGTGGCGGACCGCTATCAGGACATAGCGTTGGCTACCCGTGATATTGCTGAAGAGCTTGGCG  
GCGAATGGGCTGACCGCTTCCTCGTGTCTTACGGTATCGCCGCTCCCGATTTCGAGCGCATCGCCTTCTATCGCCTTCTT  
GACGAGTTCTTCTGAGCGGGACTCTGGGGTTCGAAATGACCGACCAAGCGACGCCAACCTGCCATCACGAGATTTGAT  
TCCACCGCCGCTTCTATGAAAGTTGGGCTTCGGAATCGTTTCCGGGACGCCGGCTGGATGATCCTCCAGCGCGGGGA  
TCTCATGCTGGAGTTCTTCGCCCACCCCAACTGTATTATGAGCTTATAATGGTTACAAATAAGCAATAGCATCACAA  
ATTTCAAAATAAGCATTTTTTCTACTGCATTCTAGTTGTGGTTTTGTCCAACTCATCAATGTATCTTATCATGTCTGT  
ATACCGTCGACCTCTAGCTAGAGCTTGGCGTAATCATGGTCATAGCTGTTTCTGTGTGAAATTGTTATCCGCTCACAA  
TCCACACAACATACGAGCCGGAAGCATAAAGTGTAAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGT  
TGCGCTCACTGCCCGCTTCCAGTCGGGAAACCTGTGCTGCCAGCTGCATTAATGAATCGGCCAACCGCGGGGAGAGGC  
GGTTTGGCTATTGGGCGCTTTCGCTTCTCGCTCACTGACTCGCTGCGCTCGGTGCTTCGGCTGCGGCGAGCGGTATC  
AGCTCACTCAAAGGCGGTAATACGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGC  
AAAAGGCCAGGAACCGTAAAAAGGCCGCTTGCTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCAAAAAAT  
CGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTCCCCCTGGAAGCTCCCTCGTGCG  
CTCTCTGTTCCGACCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGGAAGCGTGCGCTTTCTCATAGCT  
CACGCTGTAGGTATCTCAGTTCGGTGTAGGTGTTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCGTTTCAGCCCGAC  
CGCTGCGCCTTATCCGGTAACATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGG  
TAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAA  
GAACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAAACA  
ACCACCGCTGTTAGCGGTTTTTTTTGTTTGAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGAT  
CTTTTCTACGGGTCTGACGCTCAGTGAACGAAAACCTCAGCTTAAGGGATTTTGGTTCATGAGATTATCAAAAAGGATCT  
TCACCTAGATCCTTTTAAATTAAAAATGAAGTTTTAAATCAATCTAAAGTATATATGAGTAACTTGGTCTGACAGTTAC  
CAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTGTTTCATCCATAGTTGCCTGACTCCCCGTCGTGTA  
GATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGTGCAATGATACCGCGAGACCCAGCTCACCAGCTCCAG  
ATTTATCAGCAATAAACAGCCAGCCGGAAGGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCTCCATCCAGTCT  
ATTAATGTTGCGGGAAGCTAGAGTAAGTAGTTCCGCAAGTTAATAGTTTGCACAACGTTGTTGCCATTGCTACAGGCAT  
CGTGGTGTACGCTCGTCTTTGGTATGGCTTCATTCAGTCCGGTTCCTAACGATCAAGGCGAGTTACATGATCCCCCA  
TGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCTCCGATCGTTGTGCAAGTAAGTTGGCCGAGTGTATCACTCATG  
GTTATGGCAGCACTGCATAATTCTTACTGTCTATGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAA  
GTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGCGTCAATACGGGATAATACCGGCCACATAGCA  
GAACTTTAAAGTGCTCATCTATTGAAAACGTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGT  
TCGATGTAACCCACTCGTGACCCCACTGATCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACAGG  
AAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACACGAAATGTTGAATACTCATACTCTTCCTTTTCAATATTATT  
GAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTGAATGTATTTAGAAAAATAAACAAATAGGGGTTCCG  
CGCACATTTCCCCGAAAAGTGCCACCTGACGTC

Fig. 10

GACGGATCGGGAGATCTCCCGATCCCCTATGGTCTGACTCTCAGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGTAT  
CTGCTCCCTGCTTGTGTGTTGGAGGTGCTGAGTAGTGCGCGAGCAAAATTTAAGCTACAACAAGGCAAGGCTTGACCGA  
CAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTGCGCTGCTTCGCGATGTACGGGCCAGATATACGCGTTGACATT  
GATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCGCGTTACATAA  
CTTACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGT  
AACGCCAATAGGGACTTTCATTGACGTCAATGGGTGGACTATTTACGGTAACTGCCCACTTGGCAGTACATCAAGTGT  
ATCATATGCCAAGTACGCCCCCTATTGACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCCAGTACATGACCTTA  
TGGGACTTTCCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTTGGCAGTACATCAA  
TGGGCGTGGATAGCGGTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTGTTGGCACC  
AAAATCAACGGGACTTTCAAAATGTGTAACAACCTCCGCCCCATTGACGCAAAATGGGCGGTAGGCGTGTACGGTGGGAG  
GTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAG  
GGAGACCCAAGCTGGCTAGCGTTTAACTTAAGCTATCACAAGTTTGTACAAAAAGCAGGCTTAGGAATGTCTGACTCA  
GTAATTCTTCGAAGTATAAAGAAATTTGGAGAGGAGAATGATGGTTTTGAGTCAGATAAATCATATAAATGATAAGAA  
ATCAAGGTTACAAGATGAGAAGAAAGGTGATGGCGTTAGAGTTGGCTTCTTCAATTGTTTCGGTTTTCTTCATCAACTG  
ACATTTGGCTGATGTTTGTGGGAAGTTTGTGTGCATTTCTCCATGGAATAGCCAGCCAGGCGTGCTACTCATTTTTGGC  
ACAATGACAGATGTTTTTATTGACTACGACGTTGAGTTACAAGAACTCCAGATTCCAGGAAAAGCATGTGTGAATAACAC  
CATTGTATGGACTAACAGTTCCCTCAACCAGAACATGACAAAATGGAACACGTTGTGGGTTGCTGAACATCGAGAGCGAAA  
TGATCAAATTTGCCAGTTACTATGCTGGAATTGCTGTGCGAGTACTTATCACAGGATATATTCAAATATGCTTTTGGGTC  
ATTGCCGCGAGCTCGTCAGATACAGAAAATGAGAAAATTTACTTTAGGAGAATAATGAGAATGGAAATAGGGTGGTTTGA  
CTGCAATTCAGTGGGGGAGCTGAATACAAGATTCTCTGATGATATTAATAAAATCAATGATGCCATAGCTGACCAAATGG  
CCCTTTTCATTAGCGCATGACCTCGACCATCTGTGGTTTCTGTGGGATTTTTCAGGGGTGGAAACTGACCTTGGTT  
ATTATTTCTGTGAGCCCTCTCATTTGGGATTGGAGCAGCCACCATTGGTCTGAGTGTGTCCAAGTTTACGGACTATGAGCT  
GAAGGCCTATGCCAAAGCAGGGGTGGTGGCTGATGAAGTCATTTATCAATGAGAACAGTGGCTGCTTTTGGTGGTGAGA  
AAAGAGAGGTTGAAAGGTATGAGAAAAATCTTGTGTTGCGCCAGCGTTGGGAATTAGAAAAGGAATAGTGATGGGATTC  
TTTACTGGATTGCTGTGGTGTCTCATCTTTTGTGTTATGCACTGGCCCTTCTGGTACGGCTCCACACTTGTCTCTGGATGA  
AGGAGAATATACACCAGGAACCTTGTCCAGATTTTCTCAGTGTATAGTAGGAGCTTTAAATCTTGGCAATGCCTCTC  
CTTGTGTTGGAAGCCTTTGCAACTGGACGTGCAGCAGCCACCAGCATTTTTGAGACAATAGACAGGAAACCCATCATTGAC  
TGCAATGTCAGAAGATGGTTACAAGTTGGATCGAATCAAGGGTGAAATTGAATCCATAATGTGACCTTCCATTATCCTTC  
CAGACCAGAGGTGAAGATTCTAAATGACCTCAACATGGCCATTAAACCAGGGGAAATGACAGCTCTGGTAGGACCCAGTG  
GAGCTGGAAAAAGTACAGCACTGCAACTCATTCAGCGATTCTATGACCCCTGTGAAGGAATGGTGACCGTGGATGGCCAT  
GACATTCGCTCTCTTAACATTGAGTGGCTTAGAGATCAGATTGGGATAGTGGAGCAAGAGCCAGTTCTGTTCTCTACCAC  
CATTCAGAAAAATATTCGCTATGGCAGAGAAGATGCAACAATGGAAGACATAGTCCAAGCTGCCAAGGAGGCCAATGCCT  
ACAACCTCATCATGGACCTGCCACAGCAATTTGACACCCTTGTGAGAGAAGGAGGAGGCCAGATGAGTGGTGGCCAGAAA  
CAAAGGGTAGCTATCGCCAGAGCCCTCATCCGAAATCCCAAGATTCTGCTTTTGGACATGGCCACCTCAGCTCTGGACAA  
TGAGAGTGAAGCCATGGTGAAGAAGTGCTGAGTAAGATTGAGCATGGGCACACAATCATTTGAGTTGCTCATCGCTTGT  
CTACGGTCAGAGCTGCAGATACCATCATTGGTTTTGAACATGGCACTGCAGTGGAAGAGGGACCCATGAAGAATTACTG  
GAAAGGAAAGGTGTTTACTTCACTCTAGTGACTTTGCAAGGCCAGGGAAATCAAGCTCTTAATGAAGAGGACATAAAGGA  
TGCAACTGAAGATGACATGCTTGCGAGGACCTTTAGCAGAGGGAGCTACCAGGATAGTTTAAAGGGCTTCCATCCGGCAAC  
GCTCCAAGTCTCAGCTTCTTACCTGGTGCACGAACCTCCATTAGCTGTTGTAGATCATAAGTCTACCTATGAAGAAGAT  
AGAAAGGACAAGGACATTCTGTGTCAGGAAGAAGTTGAACCTGCCCCAGTTAGGAGGATTCTGAAATTCAGTGTCTCAGA

ATGGCCCTACATGCTGGTAGGGTCTGTGGGTGCAGCTGTGAACGGGACAGTCACACCCTTGATGCCTTTTTATTAGCC  
AGATTCTTGGGACTTTTTCAATTCCTGATAAAGAGGAACAAAGGTACAGATCAATGGTGTGTGCCTACTTTTTGTAGCA  
ATGGGCTGTGTATCTCTTTTACCCCAATTTCTACAGGGATATGCCTTTGCTAAATCTGGGGAGCTCCTAACAAAAAGGCT  
ACGTAAATTTGGTTTCAGGGCAATGCTGGGGCAAGATATTGCCTGGTTTGATGACCTCAGAAATAGCCCTGGAGCATTGA  
CAACAAGACTTGCTACAGATGCTTCCCAAGTTCAAGGGGCTGCCGGCTCTCAGATCGGGATGATAGTCAATTCCTTCACT  
AACGTCAGTGTGGCCATGATCATTGCCTTCTCCTTTAGCTGGAAGCTGAGCCTGGTCATCTTGTGCTTCTTCCCTTCTT  
GGCTTTATCAGGAGCCACACAGACCAGGATGTTGACAGGATTTCCTCTCGAGATAAGCAGGCCCTGGAGATGGTGGGAC  
AGATTACAAATGAAGCCCTCAGTAACATCCGCACTGTTGCTGGAATTGGAAAGGAGAGGCGGTTTCATTGAAGCACTTGAG  
ACTGAGCTGGAGAAGCCCTTCAAGACAGCCATTAGAAAGCCAAATATTTACGGATTCTGCTTTGCTTTGCCAGTGCAT  
CATGTTTATTGCGAATTCTGCTTCTACAGATATGGAGGTTACTTAATCTCCAATGAGGGGCTCCATTTACAGTATGTGT  
TCAGGGTGATCTCTGCACTGTACTGAGTGCAACAGCTCTTGAAGAGCCTTCTCTTACACCCCAAGTTATGCAAAAGCT  
AAAATATCAGCTGCACGCTTTTTTCAACTGCTGGACCGACAACCCCCAATCAGTGTATACAATACTGCAGGTGAAAAATG  
GGACAACCTCCAGGGGAAGATTGATTTTGTGATTGTAAATTTACATATCCTTCTCGACCTGACTCGCAAGTTCTGAATG  
GTCTCTCAGTGTGATTAGTCCAGGGCAGACACTGGCGTTTGTGGGAGCAGTGGATGTGGCAAAAGCACTAGCATTAG  
CTGTTGGAACGTTTCTATGATCCTGATCAAGGGAAGGTGATGATAGATGGTCATGACAGCAAAAAGTAAATGTCCAGTT  
CCTCCGCTCAAACATTGGAATTGTTTCCAGGAACCAAGTGTGTTTGCCTGTAGCATAATGGACAATATCAAGTATGGAG  
ACAACACCAAAGAAATTTCCATGGAAAGAGTCATAGCAGCTGCAAAACAGGCTCAGCTGCATGATTTTGTATGTCACTC  
CCAGAGAAATATGAACTAACGTTGGGTCCCAGGGGTCTCAACTCTCTAGAGGGGAGAAACAACGCATTGCTATTGCTCG  
GGCCATTGTACGAGATCCTAAATCTTGCTACTAGATGAAGCCACTTCTGCCTTAGACACAGAAAGTGAAGACGGTGC  
AGGTTGCTCTAGACAAAGCCAGAGAGGGTCGGACCTGCATTGTTCATTGCCCATCGCTTGTCCACCATCCAGAACGCGGAT  
ATCATTGCTGTATGGCAGAGGGGTGGTATTGAAAAGGGGACCCATGAAGAACTGATGGCCCAAAAGGAGCCTACTA  
CAAAGTAGTACCACTGGATCCCCATCAGTTGAGACCCAGCTTTCTGTACAAAGTGGTGATTGGTACCGAGCTCGGAT  
CCACTAGTCCAGTGTGGTGAATTTCTGCAGATATCCAGCACAGTGGCGGCCGCTCGAGTCTAGAGGGCCCGTTTAAACCC  
GCTGATCAGCCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGGCCCTCCCCCGTGCCTTCTTACCCCTGGAA  
GGTGCCACTCCCACTGTCTTTCTTAATAAAATAGGAAATTCATCGCATTGTCTGAGTAGGTGTCAATCTATTCTGGG  
GGGTGGGTGGGGCAGGACAGCAAGGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGGATGCGGTGGGCTCTATGG  
CTTCTGAGGCGGAAAGAACAGCTGGGGCTTAGGGGTATCCCCACGCGCCCTGTAGCGGCGCATTAGCGCGGCGGGT  
GTGGTGGTTACGCGCAGCGTGACCGCTACACTTGCCAGCGCCCTAGCGCCGCTCCTTTCGCTTCTTCCCTTCTTTCT  
CGCCACGTTCCGCCGCTTTCCCGTCAAGCTCTAAATCGGGGCATCCCTTTAGGGTCCGATTTAGTGCTTTACGGCACC  
TCGACCCCAAAAACTTGATTAGGGTGATGGTTCACGTAGTGGGCCATCGCCCTGATAGACGGTTTTCGCCCTTTGACG  
TTGGAGTCCACGTTCTTTAATAGTGACTCTTGTTCAAACTGGAACAACACTCAACCCATCTCGGTCTATTCTTTTGA  
TTTATAAGGGATTTTGGGGATTTGGGCTATTGGTTAAAAATGAGCTGATTTAACAAAAATTTAACGCGAATTAATTCT  
GTGGAATGTGTGTCAGTTAGGGTGTGGAAGTCCCCAGGCTCCCCAGGCAGGCAGAAGTATGCAAAGCATGCATCTCAAT  
TAGTCAGCAACCAGGTGTGGAAGTCCCCAGGCTCCCCAGCAGGCAGAAGTATGCAAAGCATGCATCTCAATTAGTCAGC  
AACCATAGTCCCGCCCTAACTCCGCCCATCCCGCCCTAACTCCGCCCAGTTCCGCCCATTTCTCCGCCCATGGCTGAC  
TAATTTTTTTTATTTATGAGAGGCCGAGGCCGCTCTGCCTCTGAGCTATTCAGAAAGTAGTGAGGAGCTTTTTTGGGA  
GGCCTAGGCTTTTGCAAAAAGCTCCCGGAGCTTGATATCCATTTTCGGATCTGATCAGCACGTGTGACAATTAATCA  
TCGGCATAGTATATCGGCATAGTATAATACGACAAGGTGAGGAACTAAACCATGGCCAAGTTGACCAGTGCCGTTCCGGT  
GCTCACCGCGCGCAGCTCGCCGGAGCGGTGAGTTCTGACCGACCGGCTCGGGTTCTCCCGGCACTTCGTGGAGGACG  
ACTTCGCCGGTGTGGTCCGGGACGACGTGACCTGTTTCATCAGCGCGGTCCAGGACCAGGTGGTGCCGGACAACACCTG  
GCCTGGGTGTGGGTGCGCGGCTGGACGAGCTGTACGCCGAGTGGTGGGAGGTGCTGTCCACGAACTTCGGGGACGCCCTC  
CGGGCCGGCCATGACCGAGATCGGCGAGCAGCCGTGGGGGCGGGAGTTCCGCCCTGCGCGACCCGGCCGCAACTGCGTGC  
ACTTCGTGGCCGAGGAGCAGGACTGACAGTGCTACGAGATTTGATTCCACCGCCGCTTCTATGAAAGGTGGGCTTC  
GGAATCGTTTTCCGGGACGCCGGCTGGATGATCTCCAGCGCGGGGATCTCATGCTGGAGTTCTTCGCCACCCCACTT

GTTTATTGCAGCTTATAATGGTTACAAATAAAGCAATAGCATCACAAATTTACAAATAAAGCATTTTTTTCACTGCATT  
CTAGTTGTGGTTTGTCCAACTCATCAATGTATCTTATCATGTCTGTATACCGTCGACCTCTAGCTAGAGCTTGGCGTAA  
TCATGGTCATAGCTGTTTCTGTGTGAAATTGTTATCCGCTCACAATTCACACACATACGAGCCGGAAGCATAAAGTG  
TAAAGCCTGGGGTGCCTAATGAGTGAGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCCTTTCCAGTCGGGAAACC  
TGTCGTGCCAGCTGCATTAATGAATCGGCCAACGCGCGGGGAGAGGCGGTTTGGCGTATTGGGCGCTCTTCCGCTTCCTCG  
CTCACTGACTCGCTGCGCTCGGTCGTTGCGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCAC  
AGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAAAGGCCGCTTGC  
TGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACA  
GGACTATAAGATACCAGGCGTTTTCCCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCCTGCCGCTTACCGGATA  
CCTGTCCGCTTTCTCCCTTCGGAAGCGTGGCGCTTTCTCAATGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCG  
TTCGCTCCAAGCTGGGCTGTGTGACGAACCCCCGTTACGCCCAGCGCTGCGCCTTATCCGGTAACTATCGTCTTGAG  
TCCAACCCGGTAAGACACGACTTATCGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGG  
TGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGC  
CAGTTACCTTCGGAAGAGGTTGGTAGCTCTTGATCCGGCAAAACCAACCGCTGGTAGCGGTGGTTTTTTTGTGTC  
AAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAA  
CGAAACTCACGTTAAGGGATTTTGGTCATGAGATTATCAAAAGGATCTTCACCTAGATCCTTTTAAATTAAAAATGAA  
GTTTTAAATCAATCTAAAGTATATATGAGTAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCA  
GCGATCTGTCTATTTCTGTTTATCCATAGTTGCCTGACTCCCCGTCGTGTAGATAACTACGATACGGGAGGGCTTACCATC  
TGGCCCCAGTGCTGCAATGATACCGCGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACAGCCAGCCGGA  
GGGCCGAGCGCAGAAGTGGTCTGCAACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGAAGCTAGAGTAAGT  
AGTTCCGCAAGTTAATAGTTTGCACAACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCGTTTGGTATGGC  
TTCATTACGCTCCGGTTCCCAACGATCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCG  
GTCTCCGATCGTTGTGCAAGTAAGTTGGCCGCGAGTTATCACTCATGGTTATGGCAGCACTGCATAATTCTCTTACT  
GTCAAGCCATCCGTAAGATGCTTTTCTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACC  
GAGTTGCTCTTGCCCGCGCTCAATACGGGATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCATTGAAAAAC  
GTTCTTCGGGGCGAAAACTCTCAAGGATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGACCCCACTGA  
TCTTCAGCATCTTTTACTTTTACCAGCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAG  
GGCGACACGAAATGTTGAATACTCATACTCTTCTTTTCAATATTATTGAAGCATTATCAGGGTTATTGTCTCATGA  
GCGGATACATATTTGAATGTATTTAGAAAAATAACAAATAGGGGTTCCGCGCATTTCCCCGAAAAGTGCCACCTGAC  
GTC

Fig. 11

GACGGATCGGGAGATCTCCCGATCCCCTATGGTCGACTCTCAGTACAATCTGCTCTGATGCCGCATAGTTAAGCCAGTAT  
CTGCTCCCTGCTTGTGTGTTGGAGGTCGCTGAGTAGTGCGCAGCAAAATTTAAGCTACAACAAGGCAAGGCTTGACCGA  
CAATTGCATGAAGAATCTGCTTAGGGTTAGGCGTTTTGCGCTGCTTCGCGATGTACGGGCCAGATATACGCGTTGACATT  
GATTATTGACTAGTTATTAAATAGTAATCAATTACGGGGTCATTAGTTTCATAGCCCATATATGGAGTTCCGCGTTACATAA  
CTTACGGTAAATGGCCCGCTGGCTGACCGCCCAACGACCCCGCCCATTGACGTCAATAATGACGTATGTTCCCATAGT  
AACGCCAATAGGGACTTTCCATTGACGTCAATGGGTGGACTATTTACGGTAAACTGCCCACTTGCCAGTACATCAAGTGT  
ATCATATGCCAAGTACGCCCCCTATGACGTCAATGACGGTAAATGGCCCGCTGGCATTATGCCAGTACATGACCTTA  
TGGGACTTTCTACTTGCCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATGCGGTTTTGGCAGTACATCAA  
TGGGCGTGGATAGCGTTTTGACTCACGGGGATTTCCAAGTCTCCACCCCATTGACGTCAATGGGAGTTTGTTTTGGCACC  
AAAATCAACGGGACTTTCCAAAATGTGTAACAACCTCGCCCCATTGACGCAATGGGCGGTAGGCGTGTACGGTGGGAG  
GTCTATATAAGCAGAGCTCTCTGGCTAACTAGAGAACCCACTGCTTACTGGCTTATCGAAATTAATACGACTCACTATAG  
GGAGACCCAAGCTGGCTAGCAGTCCAGGAATCATGCTGGAGAAGTTCTGCAACTCTACTTTTTTGAATTCCTCATTCTCG  
GACAGTCCGGAGGCAGACCTGCCACTTTGTTTTGGAGCAACTGTTCTGGTGTGGATTCCCTTGGGCTTCTATGGCTCCT  
GGCCCCCTGGCAGCTTCTCCACGTGTATAAATCCAGGACCAAGAGATCCTCTACCACCAAACTCTATCTTGCTAAGCAGG  
TATTCGTTGGTTTTCTTCTTATTCTAGCAGCCATAGAGCTGGCCCTTGTACTCACAGAAGACTCTGGACAAGCCACAGTC  
CCTGCTGTTTCGATATACCAATCCAAGCCTCTACCTAGGCACATGGCTCCTGGTTTTGCTGATCCAATACAGCAGACAATG  
GTGTGTACAGAAAACTCCTGGTTCCTGTCCCTATTCTGGATTCTCTCGATACTCTGTGGCACTTTCCAATTTAGACTC  
TGATCCGGACACTCTTACAGGGTGACAATTCTAATCTAGCCTACTCCTGCCTGTTCTTCATCTCCTACGGATTCCAGATC  
CTGATCCTGATCTTTTTCAGCACTTTTCAGAAAATAATGAGTCATCAAATAATCCATCATCCATAGCTTCATTCTGAGTAG  
CATTACCTACAGCTGGTATGACAGCATATTCTGAAAGGCTACAAGCGTCTCTGACACTCGAGGATGTCTGGGAAGTTG  
ATGAAGAGATGAAAACCAAGACATTAGTGAGCAAGTTTGAAACGCACATGAAGAGAGAGCTGCAGAAAGCCAGGCGGGCA  
CTCCAGAGACGGCAGGAGAAGAGCTCCAGCAGAACTCTGGAGCCAGGCTGCCTGGCTTGAAACAAGAATCAGAGTCAAAG  
CCAAGATGCCCTTGCTCTGGAAGATGTTGAAAAGAAAAAAGAGTCTGGGACCAAAAAGATGTTCCAAAATCCTGGT  
TGATGAAGGCTCTGTTCAAACTTTCTACATGGTGCTCCTGAAATCATTCTCTACTGAAGCTAGTGAATGACATCTTCACG  
TTTGTGAGTCTCAGCTGCTGAAATGCTGATCTCCTTTGCAAGTGACCGTGACACATATTTGTGGATTGGATATCTCTG  
TGCAATCCTCTTATTCACTGCGGCTCTCATTCACTCTTTCTGCCCTCAGTGTTATTTCCAACCTGTGCTTCAAGCTGGGTG  
TAAAAGTACGGACAGCTATCATGGCTTCTGTATATAAGAAGGCATTGACCCTATCCAACCTGGCCAGGAAGGAGTACACC  
GTTGGAGAAACAGTGAACCTGATGTCTGTGGATGCCAGAAGCTCATGGATGTGACCAACTTCATGCACATGCTGTGGTC  
AAGTGTTCTACAGATTGTCTTATCTATCTTCTCTCTATGGAGAGAGTTGGGACCCTCAGTCTTAGCAGGTGTTGGGGTGA  
TGGTGCTTGTAATCCCAATTAATGCGATACTGTCCACCAAGAGTAAGACCATTCAAGTCAAAAAATGAAGAATAAAGAC  
AAACGTTTAAAGATCATGAATGAGATTCTTAGTGAATCAAGATCCTGAAATATTTTGCCTGGGAACCTTCATTGAGAGA  
CCAAGTACAAAACCTCCGGAAGAAAGAGCTCAAGAACCTGCTGGCCTTTAGTCAACTACAGTGTGTAGTAATATTCTCT  
TCCAGTTAACTCCAGTCTGCTGATCTGTGGTCACATTTCTGTTTATGTCTGCTGGTGGATAGCAACAATATTTGGATGCA  
CAAAGGCCCTTACCTCCATTACCTCTTCAATATCCTGCGCTTTCCCTGAGCATGCTTCCCATGATGATCTCCTCCAT  
GCTCCAGGCCAGTGTTTCCACAGAGCGGCTAGAGAAGTACTTGGGAGGGGATGACTTGGACACATCTGCCATTTCGACATG  
ACTGCAATTTTGACAAAGCCATGCAGTTTTCTGAGGCCTCCTTTACCTGGGAACATGATTGGAAGCCACAGTCCGAGAT  
GTGAACCTGGACATTATGGCAGGCCAACTTGTGGCTGTGATAGGCCCTGTGCGCTCTGGGAAATCCTCCTTGATATCAGC  
CATGCTGGGAGAAATGGAAATGTCCAGGGCACATCACCATCAAGGGCACCACTGCCTATGTCCCACAGCAGTCTGGGA  
TTCAGAATGGCACCATAAAGGACAACATCCTTTTGGAAACAGAGTTAATGAAAAGAGGTACCAGCAAGTACTGGAGGCC  
TGTGCTCTCCTCCAGACTTGGAAATGCTGCCTGGAGGAGATTGGCTGAGATTGGAGAGAAGGGTATAAATCTTAGTGG  
GGGTGCAAGCAGCGGATCAGCCTGGCCAGAGCTACCTACCAAAATTTAGACATCTATCTTCTAGATGACCCCTGTCTG



CAGTGGATGCTCATGTAGGAAAACATATTTTTAATAAGGTCTTGGGCCCCAATGGCCTGTTGAAAGGCAAGACTCGACTC  
TTGGTTACACATAGCATGCACTTTCTTCTCAAGTGGATGAGATTGTAGTTCTGGGGAATGGAACAATTGTAGAGAAAGG  
ATCCTACAGTGTCTCTCTGGCCAAAAAAGGAGAGTTTGCTAAGAATCTGAAGACATTTCTAAGACATACAGGCCCTGAAG  
AGGAAGCCACAGTCCATGATGGCAGTGAAGAAGAAGACGATGACTATGGGCTGATATCCAGTGTGGAAGAGATCCCCGAA  
GATGCAGCCTCCATAACCATGAGAAGAGAGAACAGCTTTCGTGGAACACTTAGCCGAGTTCTAGGTCCAATGGCAGGCA  
TCTGAAGTCCCTGAGAACTCCTTGAAACTCGGAATGTGAATAGCCTGAAGGAAGACGAAGAACTAGTGAAAGGACAAA  
AACTAATTAAGAAGGAATTCATAGAACTGGAAAGGTGAAGTTCTCCATCTACCTGGAGTACCTACAAGCAATAGGATTG  
TTTTCGATATTCTTCATCATCTTGCCTTGTGATGAATCTGTGGCTTTTATTGGATCCAACCTCTGGCTCAGTGCTTG  
GACCAGTGAAGTCTAAATCTTCAATAGCACCGACTATCCAGCATCTCAGAGGGACATGAGAGTTGGAGTCTACGGAGCTC  
TGGGATTAGCCCAAGGTATATTTGTGTTTCATAGCACATTTCTGGAGTGCCTTTGGTTTCGTCCATGCATCAAATATCTTG  
CACAAGCAACTGCTGAACAATATCCTTCGAGCACCTATGAGATTTTTTGACACAACCCACAGGCCGATTGTGAACAG  
GTTTGCCGGCGATATTTCCACAGTGGATGACACCTGCCTCAGTCTTGCGCAGCTGGATTACATGCTTCTGGGGATAA  
TCAGCACCTTGTTCATGATCTGCATGGCCACTCCTGTCTTCACCATCATCGTCATTCCTCTTGGCATTATTTATGTATCT  
GTTCAGATGTTTTATGTGTCTACCTCCCGCCAGCTGAGGCGTCTGGACTCTGTCAACAGGTCCTCAATCTACTCTCACTT  
CAGCGAGACCGTATCAGGTTTGCCAGTTATCCGTGCCTTTGAGCACCAGCAGCGATTCTGAAACACAATGAGGTGAGGA  
TTGACACCAACCAGAAATGTGTCTTTTCCTGGATCACCTCCAACAGGTGGCTTGCAATTCGCCTGGAGCTGTTGGGAAC  
CTGACTGTCTTCTTTTCAGCCTTGATGATGTTATTTATAGAGATACCCTAAGTGGGGACACTGTTGGCTTTGTTCTGTC  
CAATGCACCTCAATATCACAAAACCTGAACTGGCTGGTGAGGATGACATCAGAAATAGAGACCAACATTGTGGCTGTTG  
AGCGAATAACTGAGTACACAAAAGTGAAAATGAGGCACCTGGGTGACTGATAAGAGGCCTCCGCCAGATTGGCCAGC  
AAAGGCAAGATCCAGTTTAACAACTACCAAGTGCAGTACCGACCTGAGCTGGATCTGGTCTCAGAGGGATCACTTGTGA  
CATTGGTAGCATGGAGAAGATTGGTGTGGTGGGCAGGACAGGAGCTGGAAGTCAATCCCTCACAACTGCCTCTTCAGAA  
TCTTAGAGGCTGCCGGTGGTCAGATTATCATGATGGAGTAGATATTGCTTCCATTGGGCTCCACGACCTCCGAGAGAAG  
CTGACCATCATCCCCAGGACCCATCCTGTTCTCTGGAAGCCTGAGGATGAATCTCGACCTTTCAACAACTACTCAGA  
TGAGGAGATTGGAAGGCCTTGGAGCTGGCTCACCTCAAGTCTTTTGTGGCCAGCCTGCAACTTGGGTTATCCACGAAG  
TGACAGAGGCTGGTGGCAACCTGAGCATAGGCCAGAGGCAGCTGCTGTGCCTGGGCAGGGCTCTGCTTCGGAAATCCAAG  
ATCCTGGTCTCTGGATGAGGCCACTGCTGCGGTGGATCTAGAGACAGACAACCTCATTGAGACGACCATCCAAAACGAGTT  
CGCCCACTGCACAGTGATCACCATCGCCACAGGCTGCACACCATCATGGACAGTGACAAGGTAATGGTCTTAGACAACG  
GGAAGATTATAGAGTGCAGGAGCCCTGAAGAACTGCTACAAATCCCTGGACCTTTTACTTTATGGCTAAGGAAGCTGGC  
ATTGAGAATGTGAACAGCACAAAATCTAGCTTAAGCTTGGTACCGAGCTCGGATCCACTAGTCCAGTGTGGTGAATTC  
TGCAGATATCCAGCACAGTGGCGGCCGCTCGAGTCTAGAGGGCCCGTTTAAACCCGCTGATCAGCCTCGACTGTGCCTTC  
TAGTTGCCAGCCATCTGTTGTTTGGCCCTCCCCGTCCTTCTTGACCTGGAAGGTGCCACTCCCACTGTCTTTTCT  
AATAAATGAGGAAATTGCATCGCATTGTCTGAGTAGGTGTCACTTATTCTGGGGGTGGGGTGGGGCAGGACAGCAAG  
GGGGAGGATTGGGAAGACAATAGCAGGCATGCTGGGGATGCGGTGGGCTCTATGGCTTCTGAGGCGGAAAGAACCAGCTG  
GGGCTCTAGGGGTATCCCCACGCGCCCTGTAGCGGCGCAATTAAGCGCGGCGGGTGTGGTGGTTACGCGCAGCGTGACCG  
CTACACTTGCCAGCGCCCTAGCGCCGCTCCTTTGCTTTCTTCCCTTCTTCTCGCCACGTTCCGCGGCTTTCCCGGT  
CAAGCTCTAAATCGGGGCATCCCTTTAGGGTTCCGATTAGTGCTTTACGGCACCTCGACCCCAAAAACCTTGATTAGGG  
TGATGGTTACAGTAGTGGCCATCGCCCTGATAGACGTTTTTTCGCCCTTTGACGTTGGAGTCCACGTTCTTTAATAGTG  
GACTCTGTGTTCCAACTGGAACAACACTCAACCCTATCTCGGTCTATTCTTTTGATTTATAAGGGATTTTGGGGATTTCG  
GCCTATTGGTTAAAAAATGAGCTGATTTAACAATAATTAACGCGAATTAATCTGTGGAATGTGTGTCAGTTAGGGTGT  
GGAAGTCCCCAGGCTCCCCAGGCAGGCAGAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCAGGTGTGGAAGT  
CCCCAGGCTCCCCAGCAGGCAGAGTATGCAAAGCATGCATCTCAATTAGTCAGCAACCATAGTCCCGCCCTAACTCCG  
CCATCCCGCCCTAACTCCGCCCAGTTCCGCCCATTCTCGCCCCATGGCTGACTAATTTTTTTTATTTATGCAGAGGC  
CGAGGCCGCTCTGCCTCTGAGCTATTCCAGAAGTAGTGAGGAGGCTTTTTTGGAGGCCTAGGCTTTTGCAAAAAGCTCC  
CGGGAGCTTGTATATCCATTTTCGGATCTGATCAGCACGTGTTGACAATAATCATCGGCATAGTATATCGGCATAGTAT

AATACGACAAGGTGAGGAACTAAACCATGGCCAAGTTGACCAGTGCCGTTCCGGTGCTCACCGCGCGGACGTCGCCGGA  
GCGGTCGAGTTCTGGACCGACCGGCTCGGGTTCTCCCGGGACTTCGTGGAGGACGACTTCGCCGGTGTTGGTCCGGGACGA  
CGTGACCCCTGTTTCATCAGCGCGGTCCAGGACCAGGTGGTGCCGACAAACCCCTGGCCTGGGTGTGGGTGCGCGGCCTGG  
ACGAGCTGTACGCCGAGTGGTCGGAGGTCTGTCCACGAACCTTCGGGACGCCCTCCGGGCGGGCCATGACCAGATCGGC  
GAGCAGCCGTGGGGGCGGGAGTTGCCCTGCGCGACCCGGCCGGCAACTGCGTGCACTTCGTGGCCGAGGAGCAGGACTG  
ACACGTGCTACGAGATTTGATTCCACCGCGCCTTCTATGAAAGGTTGGGCTTCGGAATCGTTTTCCGGGACGCCGGCT  
GGATGATCCTCCAGCGCGGGGATCTCATGTGGAGTTCTTCGCCCACCCCAACTTGTTTATTGCAGCTTATAATGGTTAC  
AAATAAAGCAATAGCATCACAATTTACAAATAAAGCATTTTTTTCAGTGCATTCTAGTTGTGGTTTGTCCAAACTCAT  
CAATGTATCTTATCATGTCTGTATACCGTCGACCTCTAGCTAGAGCTTGGCGTAATCATGGTCATAGCTGTTTTCTGTGT  
GAAATTGTTATCCGCTCACAATTCACACAACATACGAGCCGGAAGCATAAAGTGTAAGCCTGGGGTGCTAATGAGTG  
AGCTAACTCACATTAATTGCGTTGCGCTCACTGCCCGCTTTCAGTCGGGAAACCTGTCTGCCAGCTGCATTAATGAAT  
CGGCCAACGCGCGGGGAGAGGCGGTTTGCGTATTGGGCGCTCTTCGCTTCCTCGCTCACTGACTCGCTGCGCTCGGTG  
TTCGGCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAAACGTTATCCACAGAATCAGGGGATAACGCAGGAAAG  
AACATGTGAGCAAAAGGCCAGCAAAAGGCCAGGAACCGTAAAGGCCGCGTTGCTGGCGTTTTTCCATAGGCTCCGCCC  
CCCTGACGAGCATCACAATAATCGACGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTC  
CCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCTGCCGCTTACCGGATACCTGTCCGCTTTCTCCCTTCGGA  
AGCGTGGCGCTTTCTCAATGCTCACGCTGTAGGTATCTCAGTTCCGTGTAGGTGCTTCGCTCCAAGCTGGGCTGTGTGCA  
CGAACCCCCGTTAGCCCGACCGCTGCGCCTTATCCGTTAACTATCGTCTTGAGTCCAACCCGTTAAGACACGACTTAT  
CGCCACTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGG  
CCTAACTACGGCTACACTAGAAGGACAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAGAGAGTTGG  
TAGCTCTTGATCCGGCAAAACAAACACCGCTGGTAGCGGTGGTTTTTTTGGTTTGAAGCAGCAGATTACGCGCAGAAAAA  
AAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGTCTGACGCTCAGTGAACGAAACTCACGTTAAGGATTTTG  
GTCATGAGATTATCAAAAAGGATCTTCACCTAGATCCTTTTAAATTAATAAGTGTAAATCAATCTAAAGTATATA  
TGAGTAAACTTGGTCTGACAGTTACCAATGCTTAATCAGTGAGGCACCTATCTCAGCGATCTGTCTATTTTCGTTTATCCA  
TAGTTGCCCTGACTCCCCGTGCTGTAGATAACTACGATACGGGAGGGCTTACCATCTGGCCCCAGTGCTGCAATGATACCG  
CGAGACCCACGCTCACCGGCTCCAGATTTATCAGCAATAAACCAGCCAGCCGGAAGGGCCGAGCGCAGAAAGTGGTCTG  
AACTTTATCCGCTCCATCCAGTCTATTAATTGTTGCCGGGAAGCTAGAGTAAGTAGTTCCGCCAGTTAATAGTTTTCGCA  
ACGTTGTTGCCATTGCTACAGGCATCGTGGTGTACGCTCGTCTTGGTATGGCTTCATTAGCTCCGGTTCCCAACGA  
TCAAGGCGAGTTACATGATCCCCATGTTGTGCAAAAAGCGGTTAGCTCCTTCGGTCTCCGATCGTTGTGCAAGTAA  
GTTGGCCGAGTGTATCACTCATGGTTATGGCAGCACTGCATAATCTCTTACTGTATGCCATCCGTAAGATGCTTTT  
CTGTGACTGGTGAGTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGCGCTCAATA  
CGGGATAATACCGCGCCACATAGCAGAACCTTAAAGTGCTCATCATTGGAAAACGTTCTTCGGGGCGAAAACCTCTCAAG  
GATCTTACCGCTGTTGAGATCCAGTTCGATGTAACCCACTCGTGACCCAACTGATCTTCAGCATCTTTTACTTTTACCA  
GCGTTTCTGGGTGAGCAAAAACAGGAAGGCAAAATGCCGCAAAAAGGGAATAAGGGCGACACGGAAATGTTGAATACTC  
ATACTCTTCTTTTTCAATATTATTGAAGCATTTATCAGGGTTATTGTCTCATGAGCGGATACATATTGAATGTATTTA  
GAAAAATAACAAATAGGGGTTCCGCGCACATTTCCCGAAAAGTGCCACCTGACGTC